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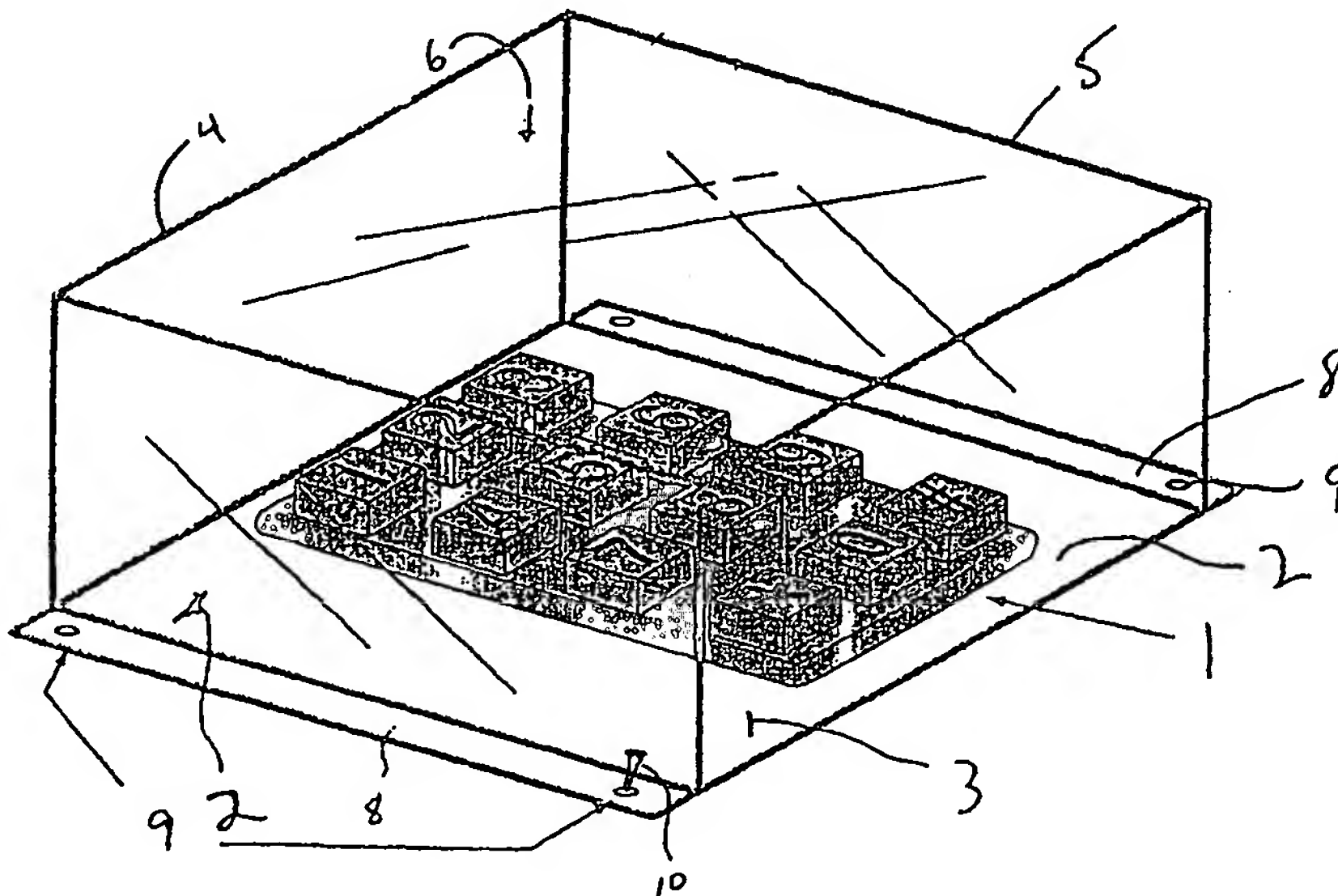
(71)(72) Applicant and Inventor: PATON, Lee, A. [US/US]; 1204
Papworth Avenue, Metairie, LA 70005 (US).

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(54) Title: DEVICE AND METHOD FOR SECURABLY CONCEALING A KEYPAD



(57) Abstract

A security device for concealing public machine keypads (1) includes a substantially U-shaped border member having a top wall (4), two opposing side walls (5) depending therefrom and an open bottom. A cover member (6) constructed with polarized plexiglass or a similar light refracting or diffusing material is mounted on the front edge of the border member. The device is mounted to the machine with the cover member suspended immediately above the keypad such that the keypad is only visible by those peering directly therethrough. Accordingly, a user may insert his or her hand into the bottom opening (3) to manipulate the keypad while the keypad remains concealed from others nearby.

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DEVICE AND METHOD FOR SECURABLY CONCEALING A KEYPAD

BACKGROUND OF THE INVENTION

The present invention relates to a device for publicly operated machines such as ATM's and telephones that is designed to conceal the keypad from everyone but the operator.

DESCRIPTION OF THE PRIOR ART

Numeric or alphanumeric keypads are found on various public telephones into which calling and/or credit card information is entered when making toll calls or purchases. Automatic teller machines are commonly used for withdrawing cash from one's bank account upon a predetermined security code being entered into a keypad. Debit card machines are becoming increasingly popular in retail outlets in which a purchase amount is automatically deducted from one's bank account once the purchaser enters a personal identification code into the keypad. In each case, the keypad is openly visible whereby persons in the vicinity may observe the user and expropriate his or her personal identification code. In fact, the media has recently documented cases in which thieves observe callers at airports and similar public locations in order to steal the caller's calling or credit card number. The present invention satisfies the above described problems by providing a device that visibly conceals the keypad from everyone but the user.

Although various keypad covers and the like exist in the prior art, most are designed for computer keyboards and do not function to visibly secure a public machine keypad. For example, U.S. patent no. 5,551,497 issued to Stanley relates to a decorative computer keyboard cover.

U.S. patent no. 4,419,704 issued to North relates to a keyboard cover.

U.S. patent no. 5,096,317 issued to Phillippe relates to a computer keyboard cover apparatus.

U.S. patent no. 4,671,688 issued to Brashears relates to a shielded keyboard.

U.S. patent no. 4,032,931 issued to Haker relates to a money transfer device keyboard terminal.

U.S. patent no. 4,834,330 issued to Swillinger relates to an anti-reflection overlay member arrangement.

Although various keypad covers exist in the prior art, most are designed to cover computer keypads. None of the above devices are capable of visibly concealing a bank machine or telephone keypad.

SUMMARY OF THE INVENTION

The present invention relates to a method and apparatus for visibly concealing the keypad on a publicly operated machine. The method and apparatus comprise a substantially U-shaped border including a pair of opaque side walls and an opaque top wall therebetween. A cover member constructed with a light polarizing or tinted material is mounted on the front edge of the border. A rear edge of each of two opposing side walls includes a flange outwardly extending therefrom each having a pair of apertures for receiving a fastener means to secure the enclosure to the machine. The enclosure is mounted such that the cover member is suspended immediately above the keypad. The space between the side walls, the cover member and the machine defines a lower opening through which a user inserts his or her hand to manipulate the keypad. It is therefore an object of the present invention to provide a device and method for concealing a transaction machine keypad that is simple to manufacture and easy to install.

It is another object of the present invention to provide a device and method for a transaction machine that visibly conceals the keypad from everyone but the user.

It is yet another object of the present invention to provide a device for visibly concealing a financial transaction machine keypad that prevents theft of personal identification codes and credit or calling card numbers.

Other objects, features and advantages of the present invention will become readily apparent from the following detailed description of the preferred embodiment when considered with the attached drawings and the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of the inventive device secured about a financial transaction machine keypad.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to Figure 1, the present invention relates to a method and apparatus for visibly concealing a keypad on a public financial or communication machine such as a bank machine or public telephone. Such machines typically include a numeric or an alphanumeric keypad 1 mounted on the exterior surface of the machine 2. When in use, the keypad is typically exposed so that those nearby can easily determine which buttons are being depressed by a user.

The present invention includes a hollow, substantially U-shaped border member including a top wall 4 with a pair of opposing side walls 5 depending therefrom. The front edge of the border member is attached to the lower surface of a substantially planar cover member 6. The lower edges of the side walls and cover member are free to form an opening 3 when the device is mounted to the machine. Extending outwardly from each side wall proximal its free

edge is an elongated flange 8 each having one or more apertures 9 thereon. The apertures receive a fastener means 10 such as a screw to secure the enclosure to the exterior surface of the machine. Alternatively, the enclosure may be secured to the panel with adhesives disposed on either the rear edge of any of the border member walls or to the bottom surface of the flanges 8.

The cover member 6 is constructed with polarized or tinted plexiglass or a similar minimally transparent material. The top and side walls preferably are constructed with an opaque material. Such a construction allows only a user who stands in front of the machine and peers directly into the cover member to see the keypad. Those standing a slight distance from the user or those who may be peering over the user's shoulder will be unable to see the keypad.

To use the above described device, the enclosure is mounted to the exterior of a public machine such as an ATM or public telephone such that the border surrounds the side and upper edges of the keypad forming an opening adjacent the lower edge thereof. To use the keypad, a user simply inserts his or her hand into the lower opening and peers directly into the cover member. Accordingly, the keypad is only visible by the user and is visibly concealed from persons nearby.

The above described device is not to be limited to the exact details of construction enumerated above. For example, many different attachment means in addition to adhesives and screws may be used. In addition, although the device has been depicted and described as being substantially rectangular, other shapes such as round will suffice. The various components may be constructed with plastic or plexiglass. However, as will be readily apparent to those skilled in the art, the size, shape and materials of construction may be varied without departing from the spirit of the present invention.

Although there has been shown and described the preferred embodiment of the present invention, it will be readily apparent to those skilled in the art that modifications may be made thereto which do not exceed the scope of the appended claims. Therefore, the scope of the invention is only to be limited by the following claims.

What is claimed is:

1. In combination with a public transaction machine, said machine including an exterior surface having a keypad thereon, a device for securably concealing said keypad comprising:

a border member mounted to the exterior surface of said machine and peripherally bordering a substantial portion of said keypad;

a cover member mounted on said border member and suspended immediately above the keypad, said border member and said cover member forming an opening when mounted on the machine through which a user may insert a hand to access the keypad, said cover member constructed with a transparent material;

means for attaching said border member to the exterior surface of said machine.

2. A device according to claim 1 wherein said border member is substantially U-shaped and includes a pair of opposing side walls, a top wall and an open bottom, each wall having a front and rear edge.

3. A device according to claim 2 wherein said means for attaching said security device comprises:

a flange extending from the rear edge of each of said side walls, said flange including at least one aperture for receiving a fastener means to secure said flange to the exterior of said public machine.

4. A device according to claim 1 wherein said border is adhesively secured to the exterior surface of the machine.

5. A device according to claim 1 wherein said cover member is tinted to minimize the amount of light from passing therethrough.

6. A device according to claim 1 wherein said cover member is constructed with a light polarizing material whereby said keypad is only visible by peering directly through said cover member from a minimal distance therefrom.

7. A device according to claim 2 wherein the device is secured to the exterior surface of said machine such that said top and side walls are perpendicular to the exterior surface of said machine to form an upstanding barrier about said keypad.

8. A device according to claim 1 wherein said border is constructed with an opaque material.

9. A method for concealing a keypad on a public machine, the method comprising the steps of:

providing an enclosure member including a border with a cover member mounted thereon, said cover member constructed with a light polarizing material, said enclosure member further including an opening;

mounting said enclosure member such that said border peripherally surrounds the keypad and said cover member is suspended immediately above said keypad.

10. A device according to claim 8 further comprising the steps of:

providing at least one flange extending outwardly from the border, said flange including an aperture for receiving a fastener means;

inserting said fastener means into said aperture and attaching the fastener means to the exterior surface of said machine.

11. A device according to claim 8 further comprising the steps of adhesively securing said enclosure member to said machine.

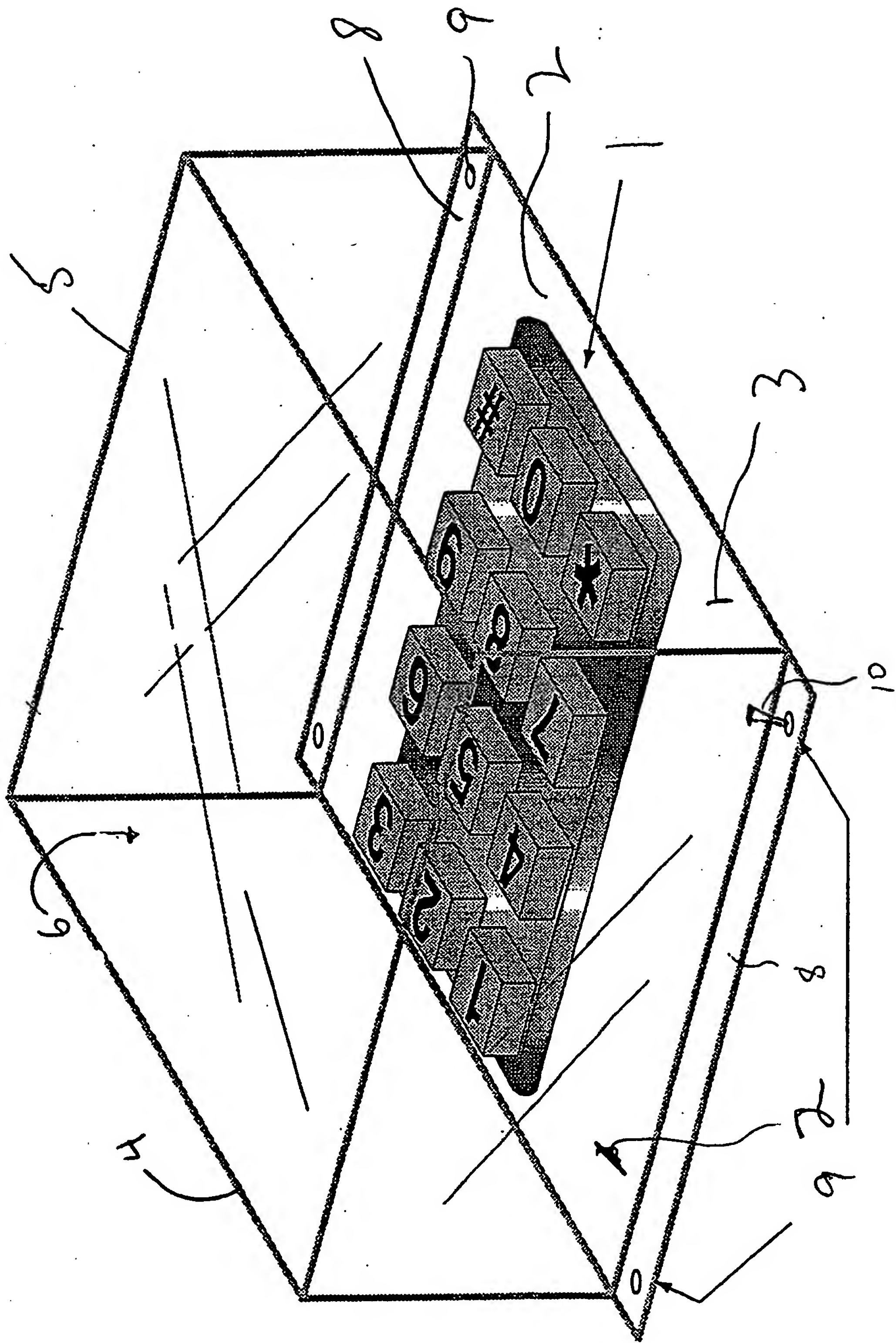


Fig. 1

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/08798

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : E04H 9/00

US CL : 109/2

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 109/2,5,9-11,53

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,632,511 A (LOUW) 30 December 1986, see entire document.	1-11
Y	US 5,205,604 A (SMITH) 27 April 1993, see entire document.	1-11

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

SUZANNE DINO BARRETT

Telephone No. 703-308-0825